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EXTENSION SERVICE

# REVIEW

U.S. DEPARTMENT OF AGRICULTURE \* MARCH 1970

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*The Extension Service Review is for Extension educators—in County, State, and Federal Extension agencies—who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.*

*The Review offers the Extension worker, in his role of educational leader, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods, tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.*

**CLIFFORD M. HARDIN**  
*Secretary of Agriculture*

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Prepared in  
Information Services  
Federal Extension Service, USDA  
Washington, D. C. 20250

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*The Extension Service Review is published monthly by direction of the Secretary of Agriculture as administrative information required for the proper transaction of the public business. Use of funds for printing this publication approved by the Director of the Bureau of the Budget July 1, 1968.*

*The Review is issued free to workers engaged in Extension activities. Others may obtain copies from the Superintendent of Documents, Government Printing Office, Washington, D. C., 20402, at 15 cents per copy or by subscription at \$1.50 a year, domestic, and \$2.25, foreign.*

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## **EXTENSION SERVICE**

# **REVIEW**

*Official monthly publication of Cooperative Extension Service; U. S. Department of Agriculture and State Land-Grant Colleges and Universities cooperating.*

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## **Your agricultural library**

The National Agricultural Library, after spending many years in USDA's South Building, moved in 1969 to a new 15-story building at the Agricultural Research Center at Beltsville, Maryland. (see cover). The USDA library was designated as the National Agricultural Library in 1962, on its 100th anniversary. It is the largest agricultural collection in the world, with more than 1 1/4 million volumes.

The NAL collection covers topics ranging from chemistry to rural sociology to economics. And through an interlibrary loan agreement, NAL has access to the libraries of other Federal Government Departments, the Library of Congress, and many others in the Washington area. The NAL is a clearinghouse for agricultural bibliographies, translations, and documentation projects.

All Extension workers, regardless of location, can benefit from the library's many services. If material you need is not available in your University library, relay your needs through your State Extension specialist. He can contact his FES counterpart, who will obtain the material through the liaison person which the NAL has assigned to the Federal Extension Service. Articles will be sent to you in photocopy or microfilm. Books generally are sent by surface mail.

The NAL is your library. It is anxious to serve you.—MAW

by

Arnold J. Heikkila

*Area Extension Coordinator*

and

John M. Sperbeck

*Extension Information Specialist*

*University of Minnesota*

## Cartoons tell 4-H story

Can a cartoon contest create awareness of 4-H programs? Extension agents in the five-county "Arrowhead" area of northeastern Minnesota think so. They used a cartoon contest to help publicize National 4-H Week in 1969.

A five-member committee appointed by the agents in the area drew up a proposal for conducting the contest and publishing winning entries in area newspapers.

The contest included all 4-H members from the five-county area. Entries were in five categories: leadership, citizenship, 4-H opportunity for all, learning by doing (project work), and 4-H is fun (activity). Members could enter as many categories as they wished.

Each entry had to include a 4-H symbol—for example, a 4-H jacket or T-shirt, a 4-H flag, or 4-H member sign.

The agents consulted one of the newspapers and learned that a 5-inch-square cartoon drawn with black ink on white paper would work best.

The committee set up \$5 awards for first place in each category, \$3 for second place, and \$2 for third place. Each county furnished \$10 of the prize money, either through their 4-H leaders' council or private donors.

They composed a suggested letter for agents to send to all their members and prepared entry blanks and contest rules to go along with it.

All entries were due at the area coordinator's office 2 weeks before National 4-H Week to allow time for judging.



The five-county area produced 65 entries. They were mounted on 8 1/2- by 11-inch paper, coded, categorized, and made ready for the judges.

After the winners were selected, the next step was to publish them. There are 13 daily and weekly newspapers in the five-county area, so photographs of the cartoons were made. The University of Minnesota-Duluth photo shop made the prints.

4-H IS Fun Any way  
you LOOK AT IT!



Extension agents wanted to use entries from their counties in their local newspapers, even if they weren't winners, so all of the originals were returned to county offices.

The committee also developed a suggested news release about National 4-H Week for agents to use in local papers. The release explained the area approach and related the cartoons to National 4-H Week.

Each agent contacted the editor of his local newspaper and discussed ways the cartoons could be used. Some papers used all the cartoons in one edition; others used one each day during National 4-H Week. Some published one cartoon and a news article each week for 5 weeks, and one used the cartoons in its Sunday edition full-page ad sponsored by businesses and individual community supporters.

A followup letter went to all participants congratulating them, listing the winners, and emphasizing that 4-H members helped create awareness of the youth program.

Agents were pleased with the results. The cartoon contest proved to be a successful publicity tool, and it resulted in many new contacts with prospective members. □

by  
Louis Daigger  
Area Extension Soils Specialist  
University of Nebraska

## Nebraska farmers say 'show me'

"I'd rather see a lesson than hear one any day." Fertilizer demonstrations in a 12-county area in the Nebraska panhandle showed the truth of this statement. The 5-year program, sponsored by Extension and the Tennessee Valley Authority, increased crop yields and income. Farmers changed practices more rapidly when "shown" than when "told."

The program was initiated by county Extension boards to meet a need for the use of more fertilizer materials to increase crop yields. They identified some of the problems:

—Insufficient nitrogen was being used for corn,

—Excess phosphorus was intensifying zinc deficiency symptoms in corn and beans,

—Irrigation, fertilizer, and management practices were not being correlated to soil type,

—Clover was disappearing from wet native meadows because of limited use of phosphate fertilizer materials,

—Farmers were unable to identify profitable enterprises because of lack of farm records.

The Extension boards and Extension personnel determined that the best approach to a solution of the problems was to establish "show" or "model" farms illustrating the value of good farm management. A joint venture involving county Extension agents, TVA, Nebraska Extension specialists, and the county Extension boards was instituted in six western Nebraska counties.

County Extension agents in the respective counties handled administrative

details. Extension specialists and TVA personnel were resource persons, and county Extension boards acted as advisors. Crops involved included corn, sugar beets, alfalfa, field beans, native dryland grass, lowland wet meadows, winter wheat, and potatoes.

Cooperators were selected with care. Established leaders in the community who influenced other farmers received first preference. Only those who were anxious to adopt proven practices on their farms were considered. TVA furnished fertilizers at an incentive price to enable farmers to test the value of fertilizer in larger amounts than customary.

Cooperators agreed to soil test and apply fertilizers according to recommendations. Accurate records of fertilizer used were required, as was the use of unfertilized strips to measure the effectiveness of the practices.

Color and growth response to fertilizer the first year greatly impressed everyone who viewed the farms. Data in the accompanying table presents convincing evidence of fertilizer response on two Unit Test Demonstration Farms for the first year.

Native meadows in subirrigated areas responded to fertilizer applications. Phosphate fertilizers applied in the fall tended to give the most profitable response. Phosphate was applied to one meadow where alsike clover had previously grown. The clover had almost disappeared, but phosphate increased clover growth and yields.

Fertilizer use increased from the demonstrations. Over 30,000 acres of meadows are now being fertilized.



*Louis Daigger, area Extension soils specialist, points out a demonstration plot where the properly fertilized wheat speaks for itself.*

Short range programs were needed in some areas to point out needs for better management and fertilizer practices. In one area, yield of corn was too low to be profitable. Five farmers were enrolled in a 2-year enterprise demonstration program.

## BENEFITS FROM FERTILIZER ON TWO TVA UNIT TEST DEMONSTRATION FARMS

Acres	Fertilizer costs	Yields (fertilized)	Control plot yields (no fertilizer)	Increase due to fertilizers	Increase in gross income
<b>FARM 1</b>					
CORN BEETS OATS					
43	\$426.30	2,862 bu	2,087 bu	37 %	\$775.00
5.75	58.40	135 T	110 T	22 %	375.00
10	87.60 \$572.30	500 bu	100 bu	400 %	240.00
					<b>Net dollar gain from fertilization</b>
					<b>\$1390.00 - 572.30 \$817.70</b>
<b>FARM 2</b>					
CORN BEETS					
31	\$301.70	2,480 bu	2,050 bu	21 %	\$430.00
49	540.64 \$842.34	1,010 T	847 T	19 %	2,445.00
					<b>Net dollar gain from fertilization</b>
					<b>\$2,875.00 842.34 \$2,032.66</b>

Soil tests and past cropping history determined fertilizer practices. Plant populations, varieties, and cultural practices were changed to encourage more efficient production. Per acre silage yields the first year were:

Fertilized area—28.5 tons

Unfertilized area—8.0 tons

Farmers' normal practice—19.5 tons

Twenty farmers in this area have requested special help as a result of this program.

Fertilizers were not entirely responsible for increased yields. Fertilizer response prompted farmers to upgrade all management practices. Tillage and planting operations were handled more carefully. Irrigation water was used more efficiently. Disease, insect, and weed control practices, as well as all other farming operations, were improved.

Extension specialists and agents capitalized on the opportunity to promote better fertility and crop management

practices. Field tours and news releases showing yield data encouraged farmers to adopt profit-making practices. Information from the demonstrations provided more effective fertilizer recommendations for the area.

The program enabled Extension agents and specialists to "get their foot in the door" of many farmers who had been reluctant to accept Extension help. Farmers in the program and neighboring areas requested assistance in livestock production, crop production, and record-keeping.

At the end of the 5-year program, fertilizer use had increased 35 percent in the Nebraska panhandle. Farmers applied 33,490 tons of fertilizer to 315,000 acres in 1967. The fertilizer was used more effectively for more efficient crop production.

Alfalfa yields had increased 0.6 tons per acre and corn yields 10 bushels per acre over the entire Nebraska panhan-

dle. Increased yields from these two crops account for about \$1 million additional income per year. Larger yields account for \$3 million in increased income per year from all crop production.

Even though this program cannot assume credit for all this increase, the publicity generated by the demonstrations has played an important role. For example, it is now almost impossible to find nitrogen-deficient corn during the growing season. The yields of crops on the farms in the program are higher now than at the start of the period.

Those participating are still looked upon by people in their neighborhoods as leaders. All of the cooperators have increased their holdings in capital assets. They have improved their farms and are more financially secure.

"I'd rather see a lesson than hear one any day." Demonstrations are the "show-me" way to encourage farmers to adopt profit-making practices. □

ican Fork, Utah, took part in an "ecological study of a canyon." This study emphasized ways that local areas may be used to enrich the regular school curriculum.

The participants met at 6:30 each morning at the American Fork Canyon. Instruction and explorations continued until 1 p.m. each day for 3 weeks.

The environmental instruction began on the flood plains near the mouth of the canyon and progressed to high, snow-covered areas.

The studies emphasized soil-plant-water interrelationships; topography and its influence on climate, soil, and plants; pristine area conditions; geology; watershed treatment for soil and plant stabilization; wildlife habitat on land and in water; primitive cultures; mining and minerals; and the multiple-use concept, including recreation and esthetics.

Perhaps the highest teacher enthusiasm for environmental understanding and awareness has been among the teachers and administrators of the Adams Elementary School in Logan,

## Teachers study environment

How can Extension help people understand that the way they treat their environment will influence how the earth and its biosphere will serve this generation and those that follow?

Conservation education programs in Utah have provided such an opportunity. Most of these involved in-service training for public school teachers. Working with teachers gives excellent "mileage," since they pass what they learn on to their students. And they are better qualified to teach their own classes than most of us are.

What they need, in most cases, is a better understanding of the interrelations, interdependence, and reactions within the natural world. They need a clearer picture of how man fits into these ecological processes.

Elementary teachers are eager to learn of their environment and to discover ways to use natural things to further their students' regular learning experiences. This became especially evident last summer in our environmental education courses for teachers.

Two week-long courses were at the Great Basin Forest and Range Experiment Station in Ephraim Canyon. Approximately 40 teachers participated in each. Harmonious living and learning periods extended from early morning until well into the night. Ample time

was allowed for individual and group student activities.

Learning took place in the various life zones, from deserts in the lower valleys to the forest on the mountaintops. Many soil, plant, animal, and water interrelationships were studied.

In midsummer, about 30 teachers from the Granite School District participated in a resident center environmental educational experience. They first toured desert areas to observe the types of vegetation and animal life. Man's history in these areas and his dependence on his environment for livestock grazing, mining, and other land uses took on living meaning.

Then the group "took to the mountains" for five additional days and nights at the Mill Hollow Outdoor Center—a lodge and barracks built and operated by the school district.

The 5 days of outdoor experiences included soil, water, and plant problems; plant and animal identification; mountaintop studies well above timber line; examinations of fossil beds; star studies; and observation of wildlife habitats. Through group and individual projects, the teachers collected natural resource materials and prepared displays to be taken back to their individual classrooms.

Later, 30 teachers and administrators from the Alpine School District in Amer-



Utah. At least 95 percent of the staff, along with other teachers in the area, participated in a formal evening course in conservation education.

Through a number of outdoors activities, these teachers learned how to recognize and appreciate their natural environment and use it to make their teaching more meaningful.

On one outing, one group collected evidences of all different stages of biotic succession; another made a color collection from nature; another collected seeds of many kinds; and yet another

group made a collection of leaf shapes and sizes. From these they made displays and determined ways of using them in their classrooms.

Excursions for examining their renewable natural environment took them into high Alpine areas, to a bird refuge, to their own school grounds, and to the Utah State University campus.

The success of these educational programs can be attributed to the fact that objectives were well defined; student participation and reaction were encouraged; regular texts, library materials,

and activity materials were made available; and we drew from a broad base for information and instructional help. Several Extension specialists, public school educators, resource managers, and public administrators gave their time and talents.

Objectives for the participating teachers have included the following:

—Understand the natural environment, its natural balances, and how man is a part of it by learning basic concepts of interrelationships between the living and nonliving.

—Recognize good and poor use practices of our natural world and be more aware of how man's actions affect the quality of life he will receive.

—Recognize and explore ways to incorporate conservation ideals into regular curricula for more effective community education programs.

—Become more aware that the real strength of any organized society is its store of natural resources and its ability to use them wisely to perpetuate the base from which man receives useful products and services.

Besides gaining a much greater appreciation for their own natural environment, these teachers have become more aware of dangers to that environment such as air and water pollution. They have determined to help awaken their students and others to the importance of maintaining healthy, desirable surroundings. Their learning is being multiplied many times as they pass these concepts and ideals on to their students. □



*Extension Forester Carl Johnson, above, points out a closeup view revealing intricate interrelationships of living and nonliving parts of the environment. A group of teachers, at left, prepare a display of natural materials for use in their classrooms.*

# Generations cooperate for better 4-H

by  
A. A. Smick  
Community Organization Specialist  
Washington State Extension Service

The generation gap is no problem in Grant County, Washington. The county's 4-H organization has turned age differences into an asset rather than a liability.

4-H project leaders and club leaders are perennially in short supply; the many retired persons living in any community often have a variety of unused skills. Mrs. Mary McKenzie, Grant County 4-H agent, and Mrs. Jessie

Jackson, Extension agent for work with senior citizens, decided to tap this latent source of volunteer leadership.

When they made the first contacts, there was a hesitance on the part of the elderly in accepting the invitations. But once the "ice was broken" and reports of satisfying experiences spread, recruiting became much easier.

The satisfying experiences happen because the agents and leaders select senior citizens carefully and provide support to them in the initial stages.

An important supporter of the program is Lyle Daverin, director of a local senior citizens' center and also a member of the Washington State Council on Aging.

Grant County's senior citizens teach knitting, conduct singing classes and rhythm bands, cook at 4-H camps, teach tatting (fast becoming a lost art), serve as judges of 4-H demonstrations, teach



*Above, a member of the 4-H Broomtail Horse Club delivers groceries to a partially blind woman. At right, senior citizen Lyle Daverin, one of the chief supporters of the program, is made an honorary 4-H member.*



fly casting to potential fishermen, and teach entomology and conservation at county camps.

4-H members and clubs have responded in many ways in appreciation for the senior citizens' leadership. Daverin was tapped for honorary county 4-H membership. 4-H members in almost every county club took cookies to shut-ins and grandparents and visited nursing homes.

One club presented a program to the members of the Senior Citizens Club. Others presented programs on citizenship, showed travelogues, entertained at suppers, and recognized older leaders during Senior Citizens Month. May was designated "Grandparents Month," and most of the 55 Grant County clubs now have a recognized "Club Grandparent."

The 4-H Broomtail Horse Club expressed their appreciation by delivering groceries and medicine to the elderly

during a period of especially cold winter weather.

These are just a few of the activities developed by senior citizens and 4-H Clubs which have resulted in a continuity of cooperation between generations. It has been a mutually beneficial and satisfying experience.

The senior citizens have provided really useful leadership to 4-H Clubs, and the 4-H'ers have gained a greater

appreciation of age. The program has worked so well that about one fourth of the Grant County 4-H leaders are senior citizens (50 or older)—but many do not consider themselves as such.

What is the situation in your community? Are you involving senior citizens as leaders or resource persons? Are your 4-H Clubs benefiting from the services of the elderly? If not, take a tip from Grant County and consider adapting their plan to your county's needs. □



*In her late 80's, Mrs. Duana Hickman, above, worked as 4-H knitting project leader. The girls made her their "adopted grandmother." At right, Dwight Wallis, 85, teaches entomology, singing, and rhythm band at a 4-H camp attended by 125 youngsters.*





*Interested shoppers, above, get tips on selecting and using pressing and sewing aids. At right, women gather around an Extension homemaker who is showing how to set in a sleeve.*



Homemakers of all ages are eager for information on the latest techniques of sewing and clothing construction. New fabrics also excite the homemaker. And she is on the lookout for information and educational materials to better prepare her for her role in the home.

The Macomb County, Michigan, Extension Service provided clothing con-

## Sewing festival reaches suburban shoppers

by

Mary Szydlik  
*Extension Home Economist  
Macomb County, Michigan*

struction classes to Extension study groups and to 4-H leaders, but the phone was always ringing with questions from others about clothing construction techniques.

Even though the callers got answers to their questions, it wasn't as good as being *shown* how to do it. A "mass production" sewing demonstration, the Ex-

tension staff decided, was the only way to reach so many people with a minimum amount of effort.

The site chosen for the demonstration was Macomb Mall—a shopping center with 54 stores under one roof. Large aisles and garden courts connect all the stores. Parking for 5,000 cars surrounds the center. Visitors number about 10,000 daily—more on weekends.

The Sewing Festival was set up in one of the courts for a 3-day period in September. 4-H leaders and women from the Macomb County Extension study groups demonstrated sewing techniques. Each covered one technique—how to put in a collar, set in a sleeve, etc. The 15 tables were set up in a circle with one person at each table to talk with shoppers on a one-to-one basis. Each demonstrator talked to more than 1,000 persons per day.

The shopping center management was enthusiastic about the program and co-operated closely with Extension to promote it. Duties connected with the event were divided as follows:

The advertising and promotional director of the shopping center:

—Contacted all merchants in the Mall to announce the program.

—Got tables and chairs for the demonstrations and set them up in the court.

—Made signs announcing the program and set them up by the nine entrances.

—Advertised the Sewing Festival on the lighted outdoor marquee.

—Set up signs at each table describing the demonstrations.

—Provided electrical hookups for sewing machines and irons.

The Macomb County Extension home economist:

—Contacted commercial companies to invite their participation.

—Invited Extension homemakers who had taken clothing construction lessons to demonstrate at the Festival.

—Trained the women so that they would be more proficient in their demonstrations.

—Made a time schedule so that each table was attended to at all times.

—Wrote a newsletter for all Extension chairmen and 4-H leaders.

—Wrote to all home economics teachers and other professional home economists in the area.

—Appeared on radio to promote the Festival. (A Detroit station featured the Festival on its 3-hour homemaker program.)

—Arranged for one of the largest stores in the Mall to advertise the Sewing Festival in their regular ads.

—Provided articles and pictures to the daily papers.

—Took literature announcing the Sewing Festival to all yard good stores and laundromats in the county.

—Got fabric remnants for the demonstrations from fabric stores.

—Set up the demonstration equipment each morning and cleared it away for the night.

Women from the Cooperative Extension Service study groups presented demonstrations on:

Pressing—one of the most popular, because men and teenagers observed it more closely than others.

Darts—second in popularity; pattern alteration examples were at the same table.

Hems—Twenty-five fabrics, with hems appropriate to each.

Jackets—Three cotton and three wool jackets made with different clothing construction techniques.

Waistbands—One-fourth scale size skirts made of several fabrics showing different types of waistbands.

Collars—Full scale samples of collar types, and demonstrations on how to pin, trim, and layer.

Sleeves—How to set in a sleeve without a running stitch.

In addition, sample cards of stitches and seam finishes were on display.

The commercial people who were part of the program thought it was an excellent way of bringing educational information to the public.

Two zipper companies demonstrated invisible and conventional zippers. A pattern company measured the women and told them their correct pattern size. Other companies showed the use of linings and interlinings and how clothing construction can be made simpler by use of sewing aids and knowledge of techniques.

More than 1,000 pieces of literature per demonstration were distributed each day, including both Extension and commercial bulletins.

Women were waiting before set-up time to get information on their sewing problems. They received the information they needed and went away satisfied.

Women of all ages attended during the day, but the majority were young homemakers with young children. Evenings and Saturday drew more teenagers, who were very interested and asked many questions. Some returned to bring a garment they had a sewing problem with, and were delighted to have one of the women correct it.

Another feature of the Festival was an Extension promotion booth. It included a display board with many pictures of Extension programs in family living. An Extension Council member manned this table, talking to people who were interested in the Sewing Festival and other Extension programs.

Even though the county Extension programs had been widely publicized in the past, some people who visited the Festival said they had never heard of the Extension Service. The Sewing Festival was a drawing card for many to stop and inquire. Many names were added to the county's 4-H and Extension groups.

The Extension study group members were willing workers, cooperation from the shopping center and the commercial companies was excellent, and the topic was of great interest to a large percentage of shoppers. These ingredients combined to make the Festival not only a good way to inform women about sewing techniques, but also a good way to reach the public with information about the overall Extension program. □

# Zoning to protect water quality



by  
Willard Bosserman  
County Extension Director  
Crawford-Roscommon Counties, Michigan

Civic leaders in Crawford County, Michigan, firmly believe that action is the best policy when it comes to protecting the water quality of their scenic rivers.

Chief concern of the county leadership in recent years has been the steady deterioration of the beautiful Au Sable River, a stream nationally famous for its trout fishing.

The wilderness stream is rapidly being encroached by homes. Protective shade trees were being cut to make a view of the river for cottage owners. The sun then had a greater opportunity to warm the waters above the 70 degrees suitable for trout.

Enough nutrients were being added to cause rapid weed growth in the river. The primary source was the waste treatment plants at Grayling and the Village of Roscommon. Private septic systems along the river also were suspected of contributing nutrients.

The civic leaders recognized that land use has a direct bearing upon water quality. With this in mind, they believed that regulating land use by zoning was one way of accomplishing their goal.

Grayling Township is five times as large as most townships in Michigan, and 20 miles of the Au Sable River flow through it.

Bernard Fowler, township supervisor, did not believe the township zoning ordi-

nance adopted in 1966 went far enough in protecting the river. He sought information about how to improve the ordinance.

One place he turned for information was the Cooperative Extension Service. Charles Kaufman, District Extension Leader, Resource Development, Michigan State University, provided information about the feasibility of green belt zoning. I got information from the Wisconsin Department of Natural Resources concerning their shoreland management program.

In the meantime, the Grayling Regional Chamber of Commerce organized the Au Sable River Watershed Study Council. This council has representatives from all townships in Crawford and Roscommon Counties through which the Au Sable River flows. Other groups, such as the Au Sable Property Owners Association, Canoe Livery Associations, and Trout Unlimited, are represented. I became president of this group.

The task of the study group was to develop a land use regulation to protect the river from over-development. After preparing a basic outline for a green belt zoning ordinance, I turned the job over to a subcommittee of the Au Sable River Watershed Study Council.

The subcommittee did a masterful job of supplying details for the ordi-

nance. After a year's work, the ordinance was approved by the whole Council and was presented for consideration by the township board.

Minor changes were made by the Crawford-Grayling Regional Planning Commission, Grayling Township Zoning Board, and the Grayling Township Board.

Adopted August 12, 1968, the Grayling Township green belt ordinance became the first of its kind in Michigan.

*Owner of the property pictured below has left little shade for the river along his shoreline. Erosion, however, has been checked with stone rip-rap.*



The green belt zoning ordinance maintains low density population along the river by requiring a minimum lot width of 150 feet. The minimum lot area is 60,000 square feet.

Low density means fewer septic tanks. And the ordinance requires that septic tanks and disposal fields be at least 3 1/2 feet above the high ground water table so that very few nutrients reach the river.

Property owners must maintain a 25-foot-wide belt of native vegetation at the river's edge to prevent bank erosion. This also enhances the esthetics of the river. Owners may prune and trim the trees in a space 50 feet long for a view of the river.

The Crawford County Zoning Commission, also with help from Extension, developed a zoning ordinance providing for a green belt zone similar to the one

in Grayling Township. The county board of supervisors adopted it in December 1968.

Green belt zoning ordinances are only one of the tools being used to protect the river from further pollution. Extension conducts an educational program in cooperation with the Au Sable River Watershed Study Council to encourage property owners to fight stream bank erosion. The Michigan Department of Natural Resources provides technical information when the property owner is ready to put in a revetment.

Since the Au Sable success, green belt zoning is being studied in other parts of northern Michigan. Townships in Roscommon, Kalkaska, and Lake Counties have already adopted regulations similar to the Crawford ordinance.

And study groups concerned with the Boardman, Big Sable, and Manistee Rivers are giving green belt zoning a long hard look.

Enforcement has presented no problem in Grayling Township. The court recently upheld the ordinance in the first case involving encroachment into the green belt zone along the Au Sable River.

This type of zoning to protect the river is working in Crawford and Roscommon Counties where most of the watershed is State-owned, but most of the river property is privately owned. It is designed to guide the inevitable development along the river.

With adjustments for the individual characteristics and problems of each river, green belt zoning should prove equally useful along many other streams. □

by  
Mrs. Ellen Ayotte  
*District Home Economist*  
and  
Roland Kaven  
*District Agricultural Agent*  
*Fairbanks District, Alaska*

## Helping newcomers adjust

People who move to any section of the country with a climate unfamiliar to them may have problems in adjusting to their new home. Newcomers to Alaska often have some particularly difficult problems to cope with during their first year, especially during their first winter in their new Alaskan home.

Some conditions which cause problems are: extreme cold and darkness during some of the winter months, relatively high cost of living, permafrost, and the lack of water and/or good water in some areas.

Questions newcomers often ask are, "How can I get my car to run at -50°?" "How can I dress my children warm enough to walk to school when the temperature is 'way below zero?" "When it is dark, will the motorists see my children as they walk to school or wait for the school bus?" And, "How can I stretch the budget to give my family the standard of living they have previously had?"

How well families adjust to the new environment and find the answers to their questions may, to a large degree, determine how long they stay in the area. It may determine whether a military tour of duty in the area is a pleasant one.

The Fairbanks District Extension staff decided to gear part of their program effort to newcomers because of the high mobility among both the military and the civilian population in the District.

Mrs. Ellen Ayotte and Roland Kaven, Extension agents in the Fairbanks District, have carried out a number of programs for newcomers in the past 2 years.

*An Extension homemaker from the Fairbanks District, right, applies reflective tape to a child's parka. Below, Bert Stimple, left, inspector for the Alaska Division of Agriculture, and R. H. Kaven, Extension agricultural agent, present a TV program on the marketing, care, and storage of vegetables.*



These have included an 8-week television series entitled *Alaskan Living*; a weekly news column entitled *Notes for Newcomers*; programs presented to various groups composed mainly of newcomers; and a letter and list of Alaska Extension publications for the welcome packet given to new teachers and new military personnel.

Mrs. Ayotte's master's thesis on The Degree of Usefulness of Extension Pub-

lications showed that newcomers found Alaska Extension publications more useful than either USDA publications or Extension publications from other States. Newcomers said they wanted more publications to help them during their first year in Alaska.

As a result, Kaven has written a publication entitled *Flower Growing in Interior Alaska*, and Mrs. Ayotte has

*Ellen Ayotte, district home economist, shows newcomer Pam Gassaway a bulletin on how to make a fur parka. Pam recently moved to Alaska from Maryland.*



written three fact sheets entitled Your First Winter in Alaska: 1) Your Car, 2) Your House, and 3) Your Clothing.

The 8-week television series on Alaskan living was presented over one of the local Fairbanks stations. Kaven and Mrs. Ayotte planned the series and alternately hosted the programs.

Guests were local resource people from the State Cooperative Extension Service, personnel from the Alaska De-

partment of Fish and Game, instructors from the University of Alaska Home Economics Department, the agricultural inspector with the Alaska Division of Agriculture, and a person from the U.S. Army Medical Research Laboratory at Fort Wainwright.

The topics covered were wild berry and mushroom identification, preservation, and use; game meat—care in the field after the kill, preservation, and

methods of cooking; vegetable storage; and dressing children for cold weather.

News releases announcing the series went to all newspapers which would reach the viewing audience. A brief story was sent to each paper prior to each program. At the conclusion of each program, viewers were invited to write or call the Cooperative Extension Service office for an Extension publication.

As a result of the program on dressing children for cold weather, the district home economist was asked to speak on this topic to several groups on the Fort Wainwright army base, several local PTA groups, and a group of nursery school parents.

Several Extension homemaker clubs in the area undertook the project of sewing reflective tape on school children's parkas or jackets. This was done as a safety measure so that the children could be seen as they wait for the school bus or walk to school during the winter months.

Some of the topics covered in the Notes for Newcomers column have been: locating a place to live, obtaining an Alaska driver's license and vehicle license, using wild berries and game meat to stretch the food dollar, winterizing the house and car, dressing the family for cold weather, Alaska laws and regulations which protect the consumer, washday problems due to minerals in the water, and how to drive safely on ice and snow.

Many of Alaska's problems may be unique, but every area has peculiarities which may be confusing to newcomers. The Fairbanks agents think they have hit on a good way to help eliminate some of the confusion. □



## Speaking from experience

The goals of rural development, as well as its organizational and operations concepts, generate lively discussions wherever and whenever Extension workers get together. The broadened role in rural development delegated to Extension by the Secretary of Agriculture late last year has intensified this interest.

Writing in the 20th annual report of the Asheville Agricultural Development Council, President Frank L. Yarbrough touched all three in terms of the experience and results of 20 years of rural development activities. He says:

"A look at the record for the past 20 years shows that this development program tied closely to the farm and rural economy has gotten results. These 20 years have been marked by outstanding progress of the farm economy and by a widespread reawakening of those early leaders who visualized the opportunities for close cooperation and promotion on an area basis.

"Over these past 20 years, we have seen cash farm receipts in western North Carolina increased by 2 1/2 times, reaching a record \$100 million in 1969. We have seen people join together in organized Community Development Clubs from one end of the area to the other, setting an example of cooperation and community action that few areas of the country can match.

"The economic impact of agricultural progress has not been limited to the confines of the farms. Progress on the farms has

stimulated related industrial growth. New processing plants for farm products and additional marketing facilities such as the many new packing plants have arisen, resulting in expanded employment and greater income for the entire area.

"These results we have seen in western North Carolina have come about because of the work of the agricultural agencies, the farm and rural people themselves. The function of the Agricultural Development Council from the beginning has been that of helping lend support to the agricultural programs and agencies in the area. This has been made possible by the hundreds of interested leaders over the area, by cooperation of the agricultural agencies, and by the City of Asheville, the Buncombe County Commissioners and farmers and businesses of the area who have provided the essential financial support."

As an indication of the importance of the progress in the area, it should be noted that while the cash receipts for farm products increased by 1.8 times for the Nation in the 20-year period, cash farm receipts for the area increased by 2.5 times.

It should also be noted that this progress resulted from interdisciplinary, interagency cooperation between citizens and leaders within the area. The Asheville Agricultural Development Council is the first group on record in the Nation to develop a comprehensive development program for rural areas as we know them today.—WJW